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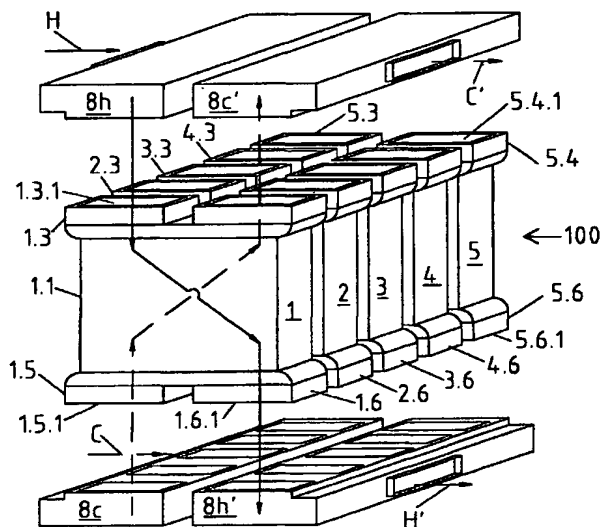
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(54) Title: MODULAR REGENERATIVE HEAT EXCHANGER SYSTEM



(57) Abstract: A plurality of independently operable regenerative heat exchanger modules (1-5) are provided to regeneratively transfer heat from a hot gas to a cold gas. The regenerative heat exchanger modules are connected to a regenerative heat exchanger system controller (1p-5p) which staggers the operation of each regenerative heat exchanger module to simulate the operation of a rotary regenerative heat exchanger. The regenerative heat exchanger system controller can manually or automatically take selected ones of the regenerative heat exchanger modules off-line while the remaining regenerative heat exchanger modules continue to simulate the operation of the rotary regenerative heat exchanger. Also disclosed are a control system and a method for operating a number of independently operable regenerative heat exchanger modules to simulate the operation of a rotary regenerative heat exchanger.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/00998

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : F28D 17/00
US CL : 165/4, 8, 9.3, 10
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 165/4, 8, 9.3, 10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3,978,912 A (PENNY ET AL) 07 SEPTEMBER 1976, ENTIRE PATENT.	1-30
Y,P	US 6,450,244 B1 (BASSILAKIS) 17 SEPTEMBER 2002, ENTIRE PATENT.	1-30
Y	US 3,225,819 A (STEVENS) 28 DECEMBER 1965, ENTIRE PATENT.	1-30
Y	US 6,129,139 A (DE CLERC) 10 OCTOBER 2000, ENTIRE PATENT.	1-30
Y	US 1,521,298 A (ISLEY) 30 DECEMBER 1924, ENTIRE PATENT.	1-30
Y	US 1,920,885 A (PETIT) 01 AUGUST 1933, ENTIRE PATENT.	1-30

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means		
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	US 5,983,986 A (MACINTYRE ET AL) 16 NOVEMBER 1999, ENTIRE PATENT.	1-30
Y	US 5,515,909 A (TANAKA) 14 MAY 1996, ENTIRE PATENT.	1-30